

**WHAT IS CLAIMED IS:**

1. A method for creating a message template used for embedding hidden messages, the method comprising the steps of:
  - (a) determining a message template performance metric comprising a dispersal measure having both a spatial domain function and a frequency domain function;
  - (b) developing a numerical optimization algorithm containing the message template performance metric as a basis for optimization;
  - (c) determining the message template geometric configuration comprising:
    - (i) determining a message template capacity
    - (ii) determining a message template area;
  - (d) applying the numerical optimization algorithm to the message template geometric configuration which results in an optimal message template.
2. The method as a claim 1, wherein step (a) includes providing the spatial domain component as a requirement to disperse ones within the message template and providing the frequency domain component as a requirement as to eliminate replicating shifts.
3. The method as in claim 1, wherein step (b) includes providing simulated annealing as the numerical optimization algorithm.
4. The method as in claim 1 further comprising the step of providing 74 bits as a capacity for the message template.
5. The method as in claim 1 further comprising the step of providing a 128 by 128 array as the message template.
6. The method as in claim 1 further comprising the step of storing the optimal message template.

7. The method as in claim 1 further comprising using (Lois to insert equation) as the spatial domain component.

8. The method as in claim 1 further comprising the step of using (Lois to insert equation) as the frequency domain component.